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Another valuable type of reflecting galvanometer is the Deprez-D'Arsonval dead-beat galvanometer (Fig. 5), or, as it is commonly called, the D'Arsonval galvanometer.

This type of instrument has won favor with all, on account of its great delicacy of action, simplicity, and convenience. In a recent article in the *London Electrician*, Professor W. E. Ayrton gives it as his opinion, that, properly constructed, this type of galvanometer, is the most sensitive instrument known for the detection or measurement of electrical quantities. It is one of the finest of the "dead-beat" variety; and the needle, after being deflected, returns to its zero position immediately, and without the slightest oscillation, while it is so sensitive that it may easily be deflected through a considerable arc by simply touching the fingers to the two terminals of the instrument. The induction-currents produced by turning a coil of wire about a diameter so as to cut the earth's lines of force may also be rendered visible to an entire

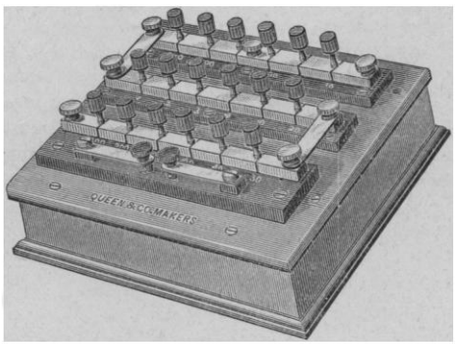

FIG. 7.

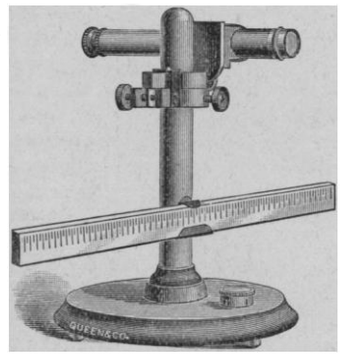

FIG. 8.

Publications received at Editor's Office, April 20-25.

BREWER, E. C. The Historic Note-Book: with an Appendix of Battles. Philadelphia, Lippincott. 997 p. 8°.
CONNECTICUT, Thirteenth Annual Report of the State Board of Health of the State of, for the Year ending Nov. 30, 1890. New Haven, State. 196 p 8°.
EMERY, F. P. Notes on English Literature. Boston, Ginn. 155 p. 12°. $1.10.
FEWKES, J. W., *ed.* A Journal of American Ethnology and Archæology. Vol. I. Boston and New York, Houghton, Mifflin, & Co. 132 p. 8°. $2.
HARPER, W. R., and TOLMAN, H. C. Eight Books of Cæsar's Gallic War. New York, Cincinnati, and Chicago, American Book Co 502 p. 12°. $1.20
KANSAS Academy of Science, Transactions of the Twenty-second Meeting of the, 1889. Vol. XII. Part. I. Topeka, Kan. Pub. House. 189 p. 8°.
MASSACHUSETTS State Agricultural Experiment Station at Amherst, Eighth Annual Report of the Board of Control of the, 1890. Boston, State. 324 p. 8°.
NEW ZEALAND Journal of Science, The. Vol. I. No. 1. January, 1891. Dunedin, Matthews, Baxter, & Co. 48 p. 8°.
PACKARD, A. S. Insects Injurious to Forest and Shade Trees. (U. S. Entom.) Commis., Bull. No. 7. Washington, Government. 957 p. 8°.
POWERS, E. War and the Weather. Revised ed. Delavan, Wis., The Author. 202 p. 12°. $1.
RIBOT, Th. The Diseases of Personality. Chicago, Open Court Pub. Co. 157 p. 12°. 75 cents
ROYAL SOCIETY of Canada Hand-Book. Montreal Meeting, 1891. Montreal, Roy. Soc. Can. 140 p. 16°.
WRIGHT, L. Optical Projection: A Treatise on the Use of the Lantern, etc. London and New York, Longmans, Green, & Co. 426 p. 12°. $2.25.
ZOOLOGICAL Gardens and Aquaria for Boston: An Appeal. Boston, Bost. Soc. Nat. Hist. 47 p. 24°.

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